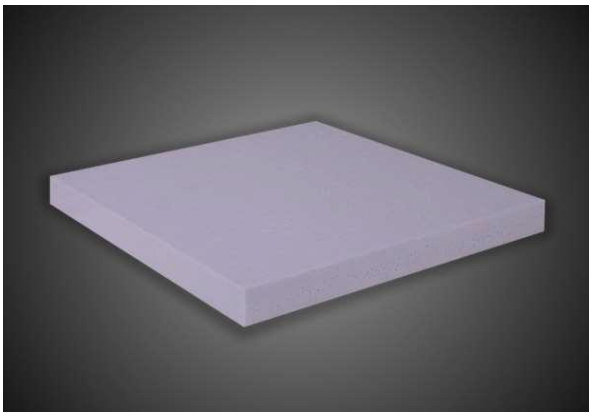
X-FOAM MLB

EXTRUDED POLYSTYRENE BOARD

[XPS - without HCFC - without HFC]



X-FOAM® MLB is a thermal insulation sheet made of indigo-coloured single-layer extruded polystyrene, without extrusion skin and with 4 straight edges. The sheets declare compressive strength values from 200 kPa to 300 kPa depending on the thickness. They have a width of 600 mm, length 3000 mm and thicknesses available from 20 to 100 mm. **X-FOAM® MLB** is fire classified EUROCCLASS E according to the European standard EN 13501-1. **X-FOAM® MLB** complies with the Minimum Environmental Criteria (CAM).

APPLICATION WITH X-FOAM® MLB: isothermal vans, sandwich panels, insulation of thermal bridges.

CE

CHARACTERISTIC	STANDARD	UNIT	VALUES
Thicknesses	EN 823	mm	20 - 100
Thickness tolerances Th from 20 mm to 100 mm	EN 823 EN 13164	mm	T2 -1,5/+1,5
Length	EN 822	mm	3000
Width	EN 822	mm	600
Length (l) and width (b) tolerances	EN 822 EN 13164	mm	l o b ≤ 1500: +/- 8 l o b > 1500: +/- 10
Orthogonality tolerance (Sb)	EN 824 EN 13164	mm/m	5
Flatness tolerance (Smax)	EN 825 EN 13164	mm/m	6
Density		kg/m^3	31 +/- 10%
Specific heat		J/kgK	1450

CHARACTERISTIC	STANDARD	UNIT	VALUES	
Thermal conductivity (λ_D) and Thermal resistance (R_D)			λ_D	R_D
Thickness 20 mm	EN 13164 EN 12667	λ_D: W/mK R_D: m^2K/W	0,031	0,65
Thickness 30 mm	EN 13164 EN 12667	λ_D: W/mK R_D: m^2K/W	0,031	0,97
Thickness 40 mm	EN 13164 EN 12667	λ_D: W/mK R_D: m^2K/W	0,032	1,25
Thickness 50 mm	EN 13164 EN 12667	λ_D: W/mK R_D: m^2K/W	0,033	1,52
Thickness 60 mm	EN 13164 EN 12667	λ_D: W/mK R_D: m^2K/W	0,033	1,82
Thickness 80 mm	EN 13164 EN 12667	λ_D: W/mK R_D: m^2K/W	0,034	2,35
Thickness 100 mm	EN 13164 EN 12667	λ_D: W/mK R_D: m^2K/W	0,034	2,94
Compressive stress at 10 % deformation Th. 20 mm to 40 mm Th. 41 mm to 80 mm Th. 81 mm to 100 mm	EN 826	kPa	≥ 200 – CS(10/Y)200 ≥ 250 – CS(10/Y)250 ≥ 300 – CS(10/Y)300	
Traction perpendicular to the faces	EN 1607	kPa	≥ 200 – TR200	
Dimensional stability at 70° C and 90% UR. Changes in thickness, length and width	EN 1604	%	≤ 5 – DS(70,90)	
Deformation behavior. Condition test 70° C, 168 h, 40 kPa	EN 1605	%	≤ 5 – DLT(2)5	
Water absorption by immersion (28 days)	EN 12087	Vol %	≤ 0,7 – WL(T)0,7	
Water absorption by diffusion (28 days)	EN 12088	Vol %	≤ 3% – WD(V)3 sp.< 60 ≤ 2% – WD(V)2 sp. 60 ≤ 1% – WD(V)1 sp.> 60	
Resistance to water vapor diffusion (μ)	EN 12086		MU 80	
Frost behavior (freeze - thaw alternation) after water absorption by long-term diffusion	EN 12091	Vol %	≤ 1 – FTCD1	
Reaction to fire	EN 13501-1	Euroclasse	E	
Limit temperature of use		°C	75	
Closed cell average		%	> 96	
VOC (Volatile Organic Compounds)	EN 16516 / ISO 16000	Class/Protocol	A+, Leed, Well, Breeam	